

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (Previously presented) A recombinant nucleic acid comprising a nucleotide sequence encoding one or more toxic agents operably linked to a pathogen-specific or tissue-specific promoter, wherein the toxic agent is constructed into a sequence encoding a ribozyme cassette comprising one or more autocatalytically cleaving ribozyme sequences.
2. (Original) The nucleic acid of claim 1, wherein the nucleic acid comprises more than one toxic agent.
3. (Previously presented) The nucleic acid of claim 1, wherein the toxic agent is a toxic gene product.
4. (Previously presented) The nucleic acid of claim 3, wherein said toxic gene product is an Addiction System toxin.
5. (Previously presented) The nucleic acid of claim 3, wherein said toxic gene product is a chromosomally encoded bacterial toxin.
6. (Previously presented) The nucleic acid of claim 3, wherein said toxic gene product is selected from the group consisting of *ccdB*, *kid*, *parE*, *doc*, *higB*, *chpAK*, *chpBK*, *kicB*, *srnB*, *flmA*, *pndA*, *relF*, *gef*, *kilA*, *kilB*, *kilC*, *kilE*, *traL*, *traE*, *sigB*, *hok*, *pemK*, *lysostaphin*, and *kika*.
7. (Original) The nucleic acid of claim 1, wherein the toxic agent is an antisense RNA.

Claims 8-9 (Cancelled).

10. (Previously presented) The nucleic acid of claim 7 wherein the antisense RNA is a *DicF1*-like antisense RNA.

11. (Previously presented) The nucleic acid of claim 2, wherein at least one toxic agent is adjacent to trans-acting ribozyme and at least one toxic agent is toxic gene product.

12. (Cancelled).

13. (Original) The nucleic acid of claim 1, wherein the toxic agent is sense RNA.

14. (Original) The nucleic acid of claim 13, wherein the sense RNA is targeted to an essential antisense molecule.

15. (Previously presented) The nucleic acid of claim 1, wherein the promoter is selected from the group consisting of a bacterial-specific promoter, a viral-specific promoter, a liver-specific promoter, a prostate-specific promoter, an epidermal-cell specific promoter, an ileum-specific promoter, a breast-specific, and a smooth muscle-specific promoter.

16. (Previously presented) The nucleic acid of claim 1, wherein the pathogen-specific promoter is selected from the group consisting of an *anr* promoter (SEQ ID NO:3), a ProC promoter (SEQ ID NO:4, a *hla* promoter, a SrcB promoter and a TSST-1 promoter (SEQ ID NO:6).

17. (Cancelled).

18. (Previously presented) A vector comprising a recombinant nucleic acid encoding one or more toxic agents operably linked to a pathogen-specific or tissue-specific promoter, wherein the toxic agent is constructed into a sequence encoding a ribozyme cassette comprising one or more autocatalytically cleaving ribozyme sequences.

19. (Previously presented) A modified virion comprising a recombinant nucleic acid comprising a nucleotide sequence encoding one or more toxic agents operably linked to a pathogen-specific or tissue-specific promoter, wherein the toxic agent is constructed into a sequence encoding a ribozyme cassette comprising one or more autocatalytically cleaving ribozyme sequences.

20. (Original) The virion of claim 19 which is a bacteriophage.

21. (Previously presented) The virion of claim 20, wherein said bacteriophage is a P1 bacteriophage.

22. (Previously presented) The virion of claim 20, wherein said bacteriophage further comprises a mutated *pac* site (SEQ ID NO:8) or a mutated *pacABC* gene.

23. (Original) The virion of claim 19, wherein the virion has a reduced ability to transfer DNA originating from the virus, and wherein the virion is capable of transferring the recombinant nucleic acid.

24. (Previously presented) The virion of claim 19, wherein the nucleic acid encodes a toxic agent selected from the group consisting of *ccdB*, *kid*, *parE*, *doc*, *higB*, *chpAK*, *chpBK*, *kicB*, *srnB*, *flmA*, *pndA*, *relF*, *gef*, *kilA*, *kilB*, *kilC*, *kilE*, *traL*, *traE*, *sigB*, *hok*, *pemK*, *lysostaphin*, and *kikA*.

Claims 25-29 (Cancelled).

30. (Previously presented) A composition comprising the modified virion of claim 19, and a pharmaceutically acceptable carrier.

31. (Previously presented) The nucleic acid of claim 1, wherein the ribozyme cassette comprises a 5' autocatalytically cleaving ribozyme sequence and a 3' autocatalytically cleaving ribozyme sequence.
32. (Previously presented) The nucleic acid of claim 1, wherein one or more autocatalytically cleaving ribozymes has enhanced cleavage activity.
33. (Previously presented) The nucleic acid of claim 1, wherein the toxic agent is targeted to an antidote.